



A Waters Company

Richard Danielson  
Biovir Laboratories  
685 Stone Rd  
Unit #6  
Benicia, CA 94510

***WP-207***



***Final Report***

# **WatR<sup>TM</sup> Pollution Proficiency Testing**

**WatR<sup>TM</sup> Pollution Study**

**Open Date: 04/16/12**

**Close Date: 05/31/12**

**Report Issued Date: 06/20/12**



A Waters Company

June 20, 2012

Richard Danielson  
Biovir Laboratories  
685 Stone Rd  
Unit #6  
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Enclosed is your final report for ERA's WP-207 WatR™Pollution Proficiency Testing (PT) study. Your final report includes an evaluation of all results submitted by your laboratory to ERA.

Data Evaluation Protocols: All analytes in ERA's WP-207 WatR™Pollution Proficiency Testing study have been evaluated using the following tiered approach. If the analyte is listed in the current TNI Fields of Proficiency Testing (FoPT) tables, the evaluation was completed by comparing the reported result to the acceptance limits generated using the criteria contained in the current TNI FoPT tables. If the analyte is not included in the TNI FoPT tables, the reported result has been evaluated using the procedures outlined in ERA's Standard Operating Procedure for the Generation of Performance Acceptance Limits (SOP 0260).

Please note the following changes to our final reports:

- At the request of the TNI Accreditation Council, we have included a Laboratory Exception Report that includes a list of all analytes reported with less than qualifiers when the assigned value was greater than "0." In addition, because we have received many requests from laboratories, this report also includes a list of all analytes with "Not Acceptable" evaluations.
- Some states have elected not to convert to the 2009 TNI Standards at this time. If you have released your results to a state that has retained the 2003 NELAC Evaluation Criteria, your final report will include a section that evaluates the results according to the 2003 Standard in addition to the 2009 TNI Standards.

Corrective Action Help: As part of your accreditation(s), you may be required to identify the root cause of any "Not Acceptable" results, implement the necessary corrective actions, and then satisfy your PT requirements by participating in a Supplemental (QuiK™Response) or future ERA PT study. ERA's technical staff is available to help your laboratory resolve any technical issues that may be impairing your PT performance and possibly affecting your routine data quality. Our laboratory and technical staff have well over three hundred years of collective experience in performing the full range of environmental analyses. As part of our technical support, ERA offers QC samples that can be helpful in helping you work through your technical issues.

Thank you for your participation in ERA's WP-207 WatR™Pollution Proficiency Testing study. If you have any questions, please contact our Proficiency Testing Department at 1-800-372-0122.

Sincerely,

A handwritten signature in black ink that reads "Jay R. McBurney". The signature is written in a cursive, flowing style.

Jay R. McBurney  
Quality Program Manager

attachments  
jrm



A Waters Company

Report Recipient	Contact/Phone Number	Reporting Type	Evaluation Type
California	Fred Choske / 510-620-3175	All Analytes	2009 TNI



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# WP-207 Definitions & Study Discussion

**Study Dates: 04/16/12 - 05/31/12**

**Report Issued: 06/20/12**

## WP Study Definitions

The Reported Value is the value that the laboratory reported to ERA.

The ERA Assigned Values are compliant with the most current TNI Fields of Proficiency Testing (FoPT) tables. A parameter not added to the standard is given an Assigned Value of "< PTRL" per the guidelines contained in the 2009 TNI Standards. The assigned values are directly traceable to the commercially prepared starting materials used to manufacture the PT standards.

The Acceptance Limits are established per the criteria contained in the most current USEPA/NELAC FoPT tables, or ERA's SOP for the Generation of Performance Acceptance Limits™ as applicable.

The Performance Evaluation:

Acceptable = Reported Value falls within the Acceptance Limits.

Not Acceptable = Reported Value falls outside the Acceptance Limits.

No Evaluation = Reported Value cannot be evaluated.

Not Reported = No Value reported.

The Method Description is the method the laboratory reported to ERA.

## WP Study Discussion

ERA's WP-207 WatR™Pollution Proficiency Testing study has been reviewed by ERA senior management and certified compliant with the requirements of the 2009 TNI PT Standard and the criteria contained in the most current TNI Fields of Proficiency Testing (FoPT) tables.

ERA's WP-207 WatR™Pollution study standards were examined for any anomalies. A full review of all homogeneity, stability and accuracy verification data was completed. All analytical verification data for all analytes met the acceptance criteria contained in the 2009 TNI PT Standard and the criteria contained in the most current TNI FoPT tables.

The data submitted by participating laboratories was also examined for study anomalies. There were no anomalies observed during the statistical review of the data.

ERA's WP-207 WatR™Pollution study reports shall not be reproduced except in their entirety and not without the permission of the participating laboratories. The report must not be used by the participating laboratories to claim product endorsement by any agency of the U. S. government.

The data contained herein are confidential and intended for your use only.

If you have any questions or concerns regarding your assessment in ERA's WatR™Pollution Proficiency Testing program, please contact our Proficiency Testing Department at 1-800-372-0122.





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# WP-207 Laboratory Exception Report

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(707) 747-5906

EPA ID:  
ERA Customer Number:  
Report Issued:  
Study Dates:

CA01401  
B354201  
06/20/12  
04/16/12 - 05/31/12

2009 TNI Evaluation Check: There are no values reported with < where the assigned value was greater than 0.

## 2009 TNI Not Acceptable Evaluations

TNI Analyte Code	Analyte	Units	Reported Value	Assigned Value	Acceptance Limits	Performance Evaluation	Method Description
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### WP WasteWatR™ Coliform MicrobE™ (cat# 576)

2525	E.coli (MPN)	MPN/100mL	110	1690	262 - 5280	Not Acceptable	SM9221F ECMUG online
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# Final Report Results For Laboratory Biovir Laboratories

## 2009 TNI Evaluation Report

Study: **WP-207**

ERA Customer Number: **B354201**

Laboratory Name: **Biovir Laboratories**

### Microbiology Results





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# WP-207 2009 TNI Evaluation Final Complete Report

Richard Danielson  
 Lab Director  
 Biovir Laboratories  
 685 Stone Rd  
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EPA ID:  
 ERA Customer Number:  
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TNI Analyte Code	Analyte	Units	Reported Value	Assigned Value	Acceptance Limits	Performance Evaluation	Method Description	Analysis Date	Z Score	Study Mean	Study Standard Deviation	Analyst Name
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**WP WasteWat<sup>TM</sup> Coliform MicrobE<sup>TM</sup> (cat# 576)**

2500	Total Coliforms (MF)	CFU/100mL	520	919	68.0 - 3530	Acceptable	SM9222B 18/19thED	5/2/2012	0.0542	489	577	
2530	Fecal Coliforms (MF)	CFU/100mL	290	919	14.0 - 2430	Acceptable	SM9222D m FC online	5/2/2012	0.264	184	402	
2525	E.coli (MF)	CFU/100mL	520	919	35.0 - 2320	Acceptable	SM9222G EC	5/2/2012	0.619	285	380	
2500	Total Coliforms (MPN)	MPN/100mL	110	1690	49.8 - 11200	Acceptable	SM9221B 18/19thED	4/30/2012	-0.343	747	1860	
2530	Fecal Coliforms (MPN)	MPN/100mL	110	1690	18.0 - 9310	Acceptable	SM9221E EC online	4/30/2012	-0.193	409	1550	
2525	E.coli (MPN)	MPN/100mL	110	1690	262 - 5280	Not Acceptable	SM9221F ECMUG online	4/30/2012	-1.28	1180	836	

Per Section 6.4.3 a of the 2009 TNI Standard, "The assigned values for quantitative microbiology analytes shall be equal to the mean of the assigned value verification and/or homogeneity testing per Sections 7.1 and 7.2". The final acceptance limits are derived from the calculated study mean and study standard deviation from laboratory-reported results. Disagreement between the assigned values and study means/acceptance limits are due to the inherent variability of microbiology methods and differences in the methods used by ERA and participant laboratories. For quantitative microbiology analytes, the assigned value is not used in the evaluation of laboratories.

**WP WasteWat<sup>TM</sup> Coliform MicrobE<sup>TM</sup> (cat# 576)**

2500	Total Coliforms (MF)	CFU/100mL		919	68.0 - 3530	Not Reported				489	577	
2530	Fecal Coliforms (MF)	CFU/100mL		919	14.0 - 2430	Not Reported				184	402	
2525	E.coli (MF)	CFU/100mL		919	35.0 - 2320	Not Reported				285	380	
2500	Total Coliforms (MPN)	MPN/100mL	1119.9	1690	49.8 - 11200	Acceptable	SM9223 COLertQT online	4/30/2012	0.200	747	1860	
2530	Fecal Coliforms (MPN)	MPN/100mL		1690	18.0 - 9310	Not Reported				409	1550	
2525	E.coli (MPN)	MPN/100mL	1119.9	1690	262 - 5280	Acceptable	SM9223 COLertQT online	4/30/2012	-0.0667	1180	836	

Per Section 6.4.3 a of the 2009 TNI Standard, "The assigned values for quantitative microbiology analytes shall be equal to the mean of the assigned value verification and/or homogeneity testing per Sections 7.1 and 7.2". The final acceptance limits are derived from the calculated study mean and study standard deviation from laboratory-reported results. Disagreement between the assigned values and study means/acceptance limits are due to the inherent variability of microbiology methods and differences in the methods used by ERA and participant laboratories. For quantitative microbiology analytes, the assigned value is not used in the evaluation of laboratories.







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# WP-207 2009 TNI Evaluation Final Complete Report

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TNI Analyte Code	Analyte	Units	Reported Value	Assigned Value	Acceptance Limits	Performance Evaluation	Method Description	Analysis Date	Z Score	Study Mean	Study Standard Deviation	Analyst Name
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**WP Enterococci (cat# 880)**

2520	Enterococci (MF)	CFU/100mL	120	78.0	31.0 - 271	Acceptable	EPA 1600 2002	5/2/2012	0.695	92.2	40.0	
2520	Enterococci (MPN)	MPN/100mL	95.9	129	33.6 - 321	Acceptable	ENTEROLERT	4/30/2012	-0.168	104	47.9	
2540	Fecal Streptococci (MF)	CFU/100mL		78.0	42.0 - 486	Not Reported				143	73.9	
2540	Fecal Streptococci (MPN)	MPN/100mL		129	36.5 - 485	Not Reported				133	74.8	

Per Section 6.4.3 a of the 2009 TNI Standard, "The assigned values for quantitative microbiology analytes shall be equal to the mean of the assigned value verification and/or homogeneity testing per Sections 7.1 and 7.2". The final acceptance limits are derived from the calculated study mean and study standard deviation from laboratory-reported results. Disagreement between the assigned values and study means/acceptance limits are due to the inherent variability of microbiology methods and differences in the methods used by ERA and participant laboratories. For quantitative microbiology analytes, the assigned value is not used in the evaluation of laboratories.

